

# **MULTIPLY**

## **PRELIMINARY CONSTRUCTION MANAGEMENT PLAN**

**SSD-10465  
Mosman High School Project**

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## 1. Introduction

This Preliminary Construction Management Plan (PCMP) has been prepared by Multiplex Construction Pty Ltd (MPX), for inclusion in the Plans and Documents noted in the NSW Department of Planning, Industry and Environment (DPIE) Secretary's Environmental Assessment Requirements (SEARs) for State Significant Development (SSD) application number 'SSD 10465'.

Upon award of Main Works contract, Multiplex, if successful, will prepare a Construction and Environmental Management Plan (CEMP), which will consider the Consent Conditions and detail the methodology for executing the works required to deliver this development. The main objective of this plan will be to prescribe strategies of minimising potential impacts of construction activities on all stakeholders and building users.

This Preliminary Construction Management Plan will detail how the construction works will be executed whilst ensuring the school can maintain operational whilst construction activities take place.

### 1.1 Response to SEARs

This PCMP has been prepared to respond to the Secretary's Environmental Assessment Requirement (SEAR's) for the works. This preliminary plan has been formulated from the design documentation provided by the Architect, Woods Bagot Pty Ltd.

The scope of this report provides a holistic approach that addresses the implementation of measures for the management of the following key items:

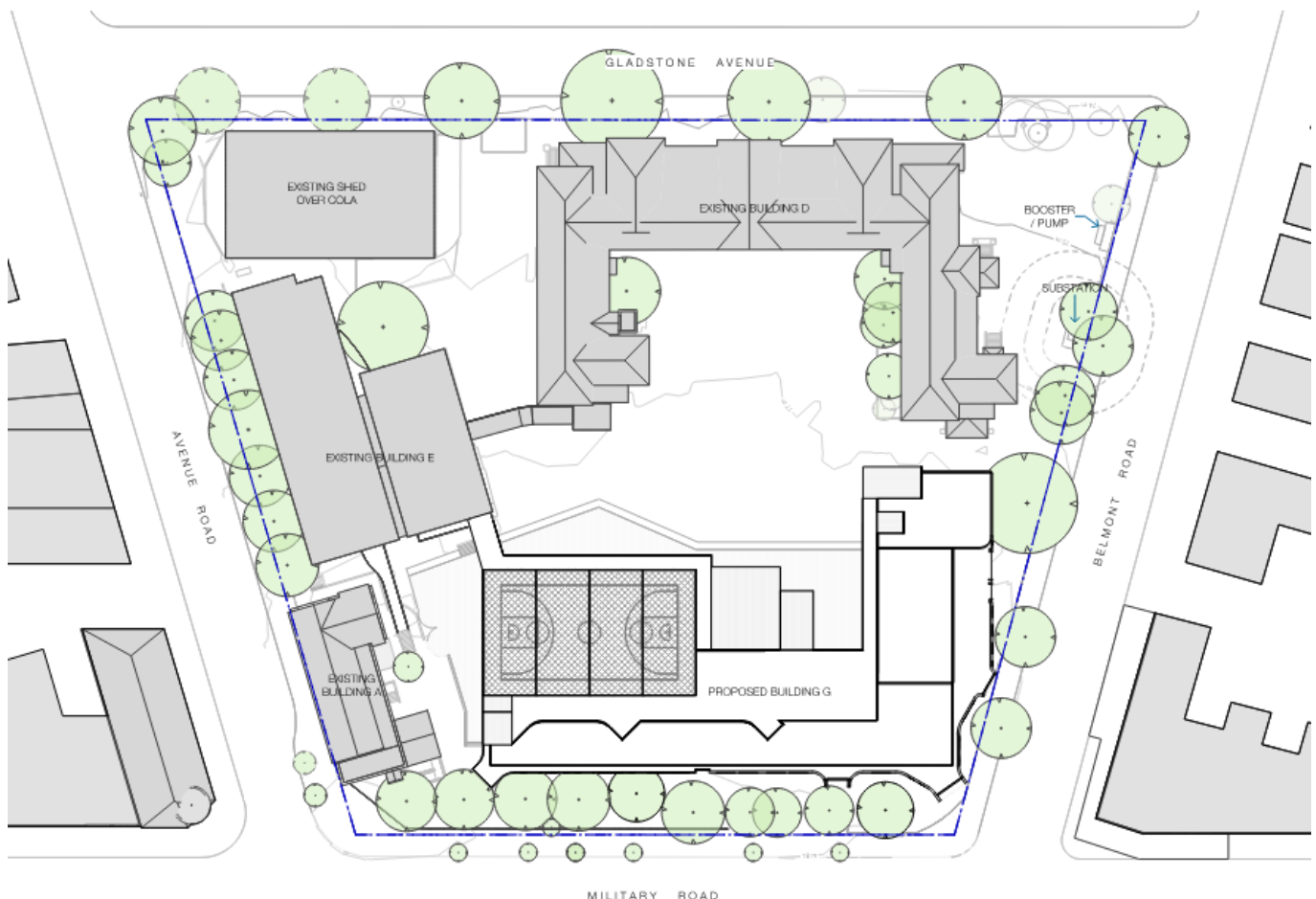
SEARs Item	Report Reference
Section 3 – Operation	Section 2
Section 7 – Transport & Accessibility	Section 2.8 & 2.9
Section 12 – Noise & Vibration	Section 3.2
Section 19 – Sediment, Erosion & Dust Control	Section 3.5
Section 20 - Waste	Section 4
Section 21 – Construction Hours	Section 2.2

### 1.2 Proposed Works

The proposed works for the upgrades to Mosman High School are set out below:

- Demolition of Building B, Building C and part Building E;
- Removal of existing tennis court and surrounding retaining walls and nominated trees;
- Construction of a new part 3 / part 4 storey building (Building G) on the corner of Military and Belmont Road providing:
  - Administration and staff facilities;

- Multipurpose gym / hall;
  - Library;
  - Canteen facilities;
  - General and senior learning units;
  - Science learning unit;
  - Health/PE and performing arts unit; and
  - Learning and admin support unit.
- Associated landscaping works including new outdoor play areas, a roof top play space, and rooftop basketball court; and
  - Relocation of the main pedestrian entrance to Belmont Road.



*Figure 1: Proposed Site Plan*

### 1.3 Site Description

The site is located within the Mosman Municipal Council LGA on Military Road in Mosman. Mosman High School comprises of one lot known as Lot 1 DP1268793, totalling to 1.4ha. The School is bound by residences on Belmont Road, to the north, and Avenue Road, to the South. It is within the commercial centre and the Heritage Conservation Area of Mosman. A site locality plan is presented in Figure 1



Figure 2: Existing Site Plan

### 1.4 Consultation

The planning and implementation of the Works will be completed in accordance with all relevant requirements of Statutory

Authorities, including:

- NSW Department of Planning, Industry and Environment;
- Government Architects NSW;
- Transport for NSW;
- Mosman Municipal Council; and

- Service providers;

Multiplex and School Infrastructure NSW (SINSW) are also undertaking extensive and ongoing consultation with the school and the wider community to maintain transparency and obtain feedback.

## **2. Construction Operations**

Multiplex will be responsible for determining construction methodology and sequencing of activities, in compliance with any milestones stipulated by the Principal, SINSW, in the Construction Contract, and in strict compliance with the Conditions of Development Consent.

The following approach to construction is indicative only and is pending the preparation of the Construction Management Plan.

### **2.1 Project Timeline**

The project is proposed to be split into two stages, Stage 1 – Early Works is expected to take approximately 5 months and consists of enabling works in order to maintain school operations upon the commencement of Stage 2 – Main Works. Early works were recently approved under Part 5 of the EP&A Act by School Infrastructure NSW as ‘development without consent’ under ISEPP. Other works are proposed as ‘Exempt Development’ under ISEPP.

Stage 2 – Main Works is expected to take approximately 15 months to complete and involves the scope nominated in 1.2 Project Description.

The anticipated total construction timeframe is approximately 20 months. During the construction stage, liaison with adjacent developments (if any) will be undertaken to mitigate the cumulative effect of the concurrent works

### **2.2 Site Establishment**

Multiplex will provide and maintain all necessary temporary facilities required for the safe and secure performance of the Works, including, but not limited to:

- First aid facilities;
- Hoardings;
- Consideration for the relative proximity of existing school operations during construction works;
- Site access gates from the public street frontages;
- Storage compounds;
- Site administration facilities;

- Cranes and hoists;
- Site amenities;
- Protection of Sydney Water assets;
- Access equipment, including scaffolding, barriers, platforms, ladders, etc;
- Construction plant; and
- Emergency vehicle access.

## **2.3 Construction Phase Hours of Operation**

Subject to the Conditions of Consent, this PCMP proposes construction hours as follows:

- between 7am and 6pm, Monday to Fridays inclusive;
- between 8am and 1pm, Saturdays; and
- No work on Sundays and public holidays

It is proposed that provided noise levels do not exceed the existing background noise level plus 5dB certain, less obtrusive construction activities may also be undertaken during the following hours:

- Between 6pm and 7pm Mondays to Fridays inclusive; and
- Between 1pm and 6pm Saturdays

All construction activities will occur within the above prescribed hours. However, permission may be sought for out-of-hours work, through utilisation of a Council granted permit or other authority approval.

## **2.4 School Operations**

To maintain school operations, temporary accommodation (demountable buildings) will be established for the duration of the Works.

This is in accordance with the Department's Demountable Accommodation for Schools Policy (Reference number: DOC16/1020453), which notes the installation of demountable buildings enables the Department to 'provide accommodation during capital works upgrades.'

Further details are provided in the below sections which illustrates effective interface strategies to maintain school operations whilst construction activities occur.

## **2.5 Public Safety, Amenity and Site Security**

Hoarding/fencing will be implemented as required to uphold public safety and ensure security of the works by preventing unauthorised entry. These measures will be staged throughout the Works so as to minimise disruption to the operations of Mosman High School, whilst ensuring the safety of all.

The following actions will be employed to minimise the impacts of construction activity to the surrounding community:

- Installation of Construction work zones and the monitoring and maintenance of such;
- Monitor compliance of the Traffic Management Plan and the safety and environmental controls listed in the CEMP or elsewhere;
- Clear display of contact details on the site temporary fencing for community information and contact in case of emergency;
- Make arrangements for the notification to surrounding properties of activities which may affect their amenity, including the provision of a 24-hour contact point; and
- Consultation and participation with the local community to address concerns and assess possible community initiatives.

Fencing demarcating the Works area and the operational school facilities will be retained for the duration of Works. However, some reconfiguration will be required from time-to-time to facilitate the connection of the Works to the existing buildings and facilities.

## **2.6 Services Disconnection and Shutdowns**

In general, the following principles will be adopted for services shutdowns or when disconnecting services:

- Services impacts on the existing facility will be investigated with full coordination, development and input with SINSW, School representatives and all relevant Stakeholders;
- Impacts on Mosman High School operations will be kept to a minimum, which may result in 'out of hours' being required;
- All relevant Statutory Authorities will be consulted, prior to the Works commencing, to ascertain lead times and correct termination locations;
- All terminations will be undertaken in accordance with SINSW requirements;
- All termination will be undertaken by suitably licensed contractors; and
- Adequate notice is to be provided to any third party that will be impacted by any service disruption and disruption is to be minimised



## **2.7 Communication with Schools and the Community**

Multiplex is committed to effective community consultation and stakeholder engagement as a means of building better relationships with the communities in which we operate, ultimately resulting in improved outcomes for the project. In order to achieve this, the following procedures will be adopted:

- Open and direct lines of communication will be implemented between Mosman High School representative and Multiplex. A nominated contact will be provided on behalf of Multiplex, who will be contactable by both mobile and email. These contact details will be clearly advertised on site hoardings and community updates.
- Multiplex will be required to meet weekly (or otherwise agreed with stakeholders) with the Mosman High School representative to discuss and outline activities planned for the week and provide a weekly works notification to the Principals; project team; and neighbours.
- For complaints that cannot be addressed by Multiplex, these will be presented to the appointed representative from the SINSW for resolution of the issues and for decisions to be made. SINSW will be made aware of any, and all, complaints received.

## **2.8 Dispute resolution**

The project team acknowledges the potential for disruption, as a result of the Works, and proposes that a complaint procedure/complaint register be developed. Should a complaint or infringement occur, the following procedures will be adopted;

- All complaints and infringements are to be brought to the attention of the Site Manager immediately upon receipt;
- The Site Manager shall investigate the complaint and ensure appropriate action is taken to address the complaint or infringement within a suitable timeframe;
- A Community Contact Notification form shall also be completed for all complaints and enquiries; and
- A copy of this documentation is to be filed within the site office.

## **2.9 Construction Traffic Management**

In response to SEARs Section 7 – Transport and Accessibility, the Preliminary Construction Traffic Management plan prepared by PTC proposes traffic control measures to address potential implications associated with the Works. In general, the following measures will be adopted:

- The proposed construction truck movements to/from the works site will be accompanied by advisory traffic control signage to minimise the traffic impact on the surrounding road network.

- All advisory road signage will be installed in accordance with AS1742.3 Manual of uniform traffic control devices - Traffic control devices for works on roads and the Roads and Maritime Services Traffic Control at Worksites Manual. Signs will be installed and maintained throughout the construction period.

Multiplex will be responsible for developing a site-specific Traffic Control Plan (TCP), upon appointment as Main Works contractor. This will be in accordance with Roads and Maritime Traffic Control at Works Site manual, with all relevant approvals and permits obtained prior to the commencement of any construction works.

## **2.10 Pedestrian and Traffic Safety**

The majority of the works will be carried out within the compounds of the school. Pedestrians will be diverted and controlled by traffic controllers as necessary when larger vehicles wish to access the site. Pedestrians will be directed through appropriate fencing/hoarding within the school, ensuring their safety is prioritised.

Pedestrian and cyclist routes past the site will be protected during construction, where required. Fencing and/or hoarding, in accordance with the relevant standards, will be provided around the site to provide protection and prevent unauthorised access.

Where works are required in the public domain, safe routes will be provided around the worksite, which will require a site-specific management plan.

## **3. Environment and Amenity**

The Contractor will prepare and implement a comprehensive Construction and Environmental Management Plan (CEMP) to ensure compliance with all relevant statutory requirements and the requirements of SINSW. This plan will be developed in consideration of the following:

- Protection of Environmental Operations Act 1997;
- Protection of the Environment Operations (Noise Control) Regulation 2000;
- WHS Act 2011;
- Protection of the Environment Operations (Clean Air) Regulation 2002;
- Waste Avoidance and Resource Recovery Act 2001;
- Protection of the Environment Operations (Waste) Regulation 1996;
- Environmentally Hazardous Chemicals Act 1985; and
- Environmentally Hazardous Chemicals Regulation 1999.

The following sections outline the environmental management principles to be implemented.

### **3.1 Unexpected Finds**

The stripping of surface soils may reveal the presence of additional fragments of asbestos sheeting or other unexpected contaminants, with the potential to pose human health risks, if not managed appropriately. If the soil encountered during the Works appears to be potentially contaminated, different from the soils otherwise encountered to date and/or a source of contamination, such as buried drums or wastewater interceptors, the following procedures will apply:

- Any suspicious material/soil which have been excavated will be stockpiled on bonded, strong, impermeable plastic sheeting, protected from erosion and all seepage retained (divided into domains or stockpiles representing similar material types);
- Excavation works at that part of the site where the suspicious material (soil, asbestos containing material or physical find) was encountered will cease until inspection is carried out by an appropriately qualified environmental consultant or its representative;
- Based on visual inspection, the environmental consultant will provide interim advice on construction health and safety, soil storage and soil disposal to allow other activities to proceed if possible; and
- Based on sampling and analysis of the material, the environmental consultant will provide advice based on comparison of the laboratory test results to appropriate criteria relating to human health, potential environmental impacts and waste disposal.
- In the context of the above, “suspicious” material would include, but is not limited to oily materials or materials with unusual odours, drums, metal or plastic chemical containers, buried solid waste, ash, slag, coke or brightly coloured material etc.
- Asbestos across SINSW sites is collectively managed through the NSW Asbestos Management Plan for NSW Government Schools 2015. Upon discovery of suspected asbestos containing material (ACM) at the site, the SINSW’s Asbestos Management Plan will be implemented with the following actions to be taken immediately:
  - Stop all activities that may disturb the materials;
  - Inform the site operator of the discovery;
  - Suspend work until it has been determined whether the material in question contains asbestos;
  - Physically quarantine the area with a pegged plastic sheet and a signed fence stating “Danger Asbestos”; and
  - Depending on the circumstance, ventilation systems may be turned off in the immediate area and vent openings sealed, if applicable and/or possible.

Multiplex will be required to comply with the Unexpected Finds Protocol developed as part of the Mosman High School site Remedial Action Plan, unless superseded by another document. As the contamination and

geotechnical investigation has largely found fill underlying the site, it is unlikely that there will be sub-surface archaeology impacted as part of the development. Despite this, in the event that a heritage or archaeological item is discovered during the course of the works, onsite works will cease and the Office of Environment and Heritage will be contacted. Advice will also be sought from a qualified Heritage Consultant, prior to work recommencing.

As part of the Aboriginal Cultural Heritage Assessment Report, it has been advised that no further Aboriginal archaeological works are required to be undertaken. However, key recommendations made have been incorporated into the Preliminary CMP, namely;

- All contractors undertaking earthworks on-site should be briefed on the protection of Aboriginal heritage objects under the National Parks and Wildlife Act 1974 and the penalties for damage to these items.
- All contractors undertaking earthworks in the study area should undergo an induction on identifying Aboriginal heritage objects; and

### **3.2 Noise and Vibration**

The existing local site users that would be most affected by potential noise and vibration would be the residents along all four major surrounding streets, namely Military Road, Avenue Road, Gladstone Avenue and Belmont Road. All practicable measures will be taken to reduce the noise and vibration arising from the Works. Noise and vibration shall not exceed the limits set out by the NSW Environmental Protection Authority. A detailed Construction Noise and Vibration Plan will be prepared in accordance with the requirements outlined in the Noise and Vibration Impact Assessment for SSDA by JHA.

Such measures may include:

- Identifying demolition, excavation and construction noise and vibration sources or scenarios that require engineering controls or administrative management;
- Promoting clear understanding of ways to identify and minimise noise and vibration from construction works;
- Focus on applying all feasible and reasonable work practices to minimise construction noise and vibration impacts;
- Providing flexibility in the selection of site-specific and reasonable work practices to minimise noise and vibration impacts;
- Allowing work to be carried out only within the approved standard hours and obtaining approval from all relevant Authorities for works required to be undertaken outside standard hours;
- Shutting or throttling equipment down, such as generators, bobcats, cranes and the like, whenever not in actual use;
- Using noise and vibration reduction techniques, including barriers, enclosures, silencers and the like to ensure compliance with construction and demolition noise and vibration criteria; and

- Maintaining all plant and equipment in a proper and efficient manner to minimise noise emissions, including the replacement of engine covers, repair of defective silencing equipment and tightening of rattling components. As part of the noise and vibration mitigation treatment for the project, Multiplex will be responsible for the checking of compliant maintenance regimes and statutory supervision of all equipment. Proposed noise and vibration mitigation treatments will be included in Multiplex's CEMP upon appointment as Main Works contractor.

### **3.3 Odour Control**

The amount of odour generated by the Works will be influenced by the extent of open excavation stockpiles, weather conditions and the quality of excavated material encountered.

Odour management will address the following key issues:

- Location and cause of odour;
- Minimisation of odour and its source;
- Odour management response procedures; and
- Implementation of an odour monitoring regime.

If air quality is considered to be unsatisfactory, Multiplex will conduct appropriate works to rectify the ambient air quality to an acceptable standard within the shortest time practicable.

### **3.4 Vegetation Protection**

Multiplex's CEMP will detail the measures that will be implemented to protect trees and vegetation being retained throughout the Works in accordance with the requirements outlined in the Arboricultural Impact Assessment Report prepared by Birds Tree Consultancy. Multiplex will ensure areas of native Fauna to be preserved through fencing and signage accordingly to avoid any damage or disturbance to the habitat and any conservation measures currently in place will be maintained.

Multiplex will also minimise the spread of weeds and grasses. This may include covering long-term stockpiles and bare areas shade cloth or revegetating to minimise the establishment of weeds. Land clearing shall be minimal and staged to reduce the total area of cleared land at one time.

### **3.5 Sediment, Erosion and Dust Control**

A Sediment and Erosion Control Plan has been prepared and forms part of the SSD application which will be implemented during construction unless superseded by a new revision. Any discharges from the site will be strictly controlled to ensure hazardous materials and contaminants are contained in accordance with the requirements of all relevant Authorities and guidance, particularly the "Blue Book" – Managing Urban Stormwater: Soils and

Construction (Landcom, 2004), approved methods for the modelling and assessment of air pollutants in NSW and Guidelines for development adjoining land managed by the Office of Environment and Heritage

The site will be continually cleaned of rubble to minimise possible sediment flow during rainfall periods.

Control measures will be established to prevent surface water run-off entering and leaving excavation and stockpile areas. Control measures may include:

- temporary bunding or diversion drains;
- impermeable sheeting placed under and/or over stockpiles;
- silt fences/silt socks to surround stockpiles; and
- protection of existing drains with silt fencing/sand bags.

These mitigation measures will be regularly inspected to ensure that they are in good condition and, if necessary, upgraded where their performance is deteriorating.

Appropriate dust mitigation and suppression techniques will be applied to ensure dust levels are compliant with the requirements of all relevant Authorities.

Operations will be modified and additional controls implemented during the Works under adverse weather conditions and will include effective covering of haulage trucks and stockpiles, as well as monitoring of weather conditions (including wind).

Management and contingency plans will be developed and implemented to prevent any foreseeable impacts from dust.

### **3.6 Contaminated water and soil profile**

All hazardous materials (including subcontractors' materials) shall be registered by the Contractor and stored in an impervious Hazardous Materials Store which will be properly maintained to ensure that it has not deteriorated and remains effective.

A spillage kit (dry absorbent material – sand, sawdust or oil absorber) shall be on-site and its location communicated. A licensed waste disposal contractor shall carry out transport and disposal of spillages.

The discovery of unexpected hazardous materials or contamination will be dealt in accordance with Council, the NSW EPA and WorkCover requirements, in consultation with SINSW, the project manager and project team members as required.

## **4. Construction Waste Management**

A Construction Waste Management Plan will be developed by Multiplex prior to commencement of construction works on site. This plan will be in accordance with the requirements outlined in the Waste Management Plan

Report by Ricardo. Periodic review of this waste management plan will be undertaken to ensure continual compliance with environmental regulations and standards.

Waste types likely to be generated on the site include the following:

- General Waste;
- Putrescible waste (lunchroom waste from site personnel);
- Cardboard and White Paper (amended plans & drawings);
- Bottles, Cans and Plastics; and
- Concrete/Bricks/Tiles/Timber and Gyprock.

## 5. Workplace Risk Management Plan

SINSW, the project manager and Multiplex will be fully committed to providing a safe working environment. A Work Health and Safety Management Plan (WHSMP) will be required to ensure that equipment, workplaces and practices comply with relevant regulations and standards. Regular and ongoing reviews of these standards will be conducted and where higher standards are practical and desirable, they will be adopted. In addition, Multiplex will:

- Provide adequate resources to satisfy this policy;
- Identify, control and reduce work related hazards and risks that may produce injury, illness or asset damage;
- Identify, quantify and control to safe levels, those chemicals and physical agents in the workplace capable of causing ill health;
- Promote environmental, health, safety and the welfare of employees and subcontractors while respecting the privacy of individuals;
- Provide information, instruction and training for employees to increase their personal understanding of workplace hazards, promote safe working practices and ensure subcontractors are aware of and satisfy these expectations.
- Consult employees and subcontractors in environmental, health and safety to reduce workplace hazards and risks;
- Consult with the project team, industry bodies and others in the development of appropriate standards, control strategies and monitoring techniques, which comply, with the requirements of statutory authorities; and
- Set short- and long-term goals in occupational health and safety management, and review performance against these goals.

A key tool in the management of safety on the project will be the continued improvement of Multiplex's Safe Work Method Statements (SWMS). These will include the following:

- A description of the work to be undertaken;
- An identification of the foreseeable hazards associated with the works; and
- A description of the hazard control measures to be used.